

USSN: 10/800,516

Docket No.: 53949US013

**PRE-APPEAL BRIEF REQUEST FOR REVIEW****Status of the Claims:**

The pending claims are claims 1-12, 23, and 25-30. Claims 13-22 and 24 have been withdrawn as directed to a non-elected species. Pending claims 1-12, 23 and 25-30 stand rejected as unpatentable under 35 U.S.C. 102(e) for purportedly being anticipated by Gurusamy et al. (US Pat. No. 6,361,423 B2), and as unpatentable under 35 U.S.C. 103(a) for purportedly being obvious over the combination of Sung (US Pat. No. 6,679,243) in view of Gurusamy et al.

**Review is requested for the following reasons:**

Appellant respectfully disagrees with the rejections of the claims for purported lack of novelty under 35 U.S.C. 102(e) over Gurusamy et al., as the Office has not met its burden of establishing the Gurusamy discloses or teaches all elements of Appellant's independent claim 1:<sup>1</sup>

1. A conditioning disk comprising a substrate, a plurality of abrasive particles, and a carrier, wherein:  
said substrate has top and bottom surfaces;  
said plurality of abrasive particles is arranged on at least a portion of said top substrate surface, said abrasive particles being affixed to said substrate with a matrix material; and  
said carrier is affixed to said bottom substrate surface, wherein said carrier comprises at least one of synthetic plastic or ceramic.  
(emphasis added)

Appellant's independent claim 23 is identical to claim 1 with replacement of "with a matrix material" by "with an electroplated metal."<sup>2</sup>

In order to support an anticipation rejection under 35 U.S.C. 102(e), it is well established that a prior art reference must disclose each and every element of a claim. This well known rule of law is commonly referred to as the "all-elements rule."<sup>3</sup> If a prior art reference fails to disclose any element of a claim, then rejection under 35 U.S.C. 102(e) is improper.<sup>4</sup> Appellant respectfully submits that the Examiner has failed to meet the burden of showing by clear evidence that Gurusamy et al. discloses or teaches all elements of Appellant's claimed invention.

<sup>1</sup> Appellant's pending application No. 10/800,516, claim 1.

<sup>2</sup> Appellant's pending application No. 10/800,516, claim 23.

<sup>3</sup> See *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 231 USPQ 81 (Fed. Cir. 1986) ("it is axiomatic that for prior art to anticipate under 102 it has to meet every element of the claimed invention").

<sup>4</sup> *Id.* See also *Lewmar Marine, Inc. v. Bariant, Inc.*, 3 USPQ2d 1766 (Fed. Cir. 1987); *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990); *C.R. Bard, Inc. v. MP Systems, Inc.*, 48 USPQ2d 1225 (Fed. Cir. 1998); *Oney v. Ratliff*, 51 USPQ2d 1697 (Fed. Cir. 1999); *Apple Computer, Inc. v. Articulate Systems, Inc.*, 57 USPQ2d 1057 (Fed. Cir. 2000).

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In particular, Appellant submits that the Examiner has not met the burden of showing by clear evidence that Gurusamy et al. discloses or teaches a conditioning disk comprising a carrier affixed to the bottom substrate surface, and further, that the Examiner has failed to meet the burden of showing that Gurusamy et al. discloses or teaches that the carrier comprises at least one of synthetic plastic or ceramic.

The Examiner, in the Office Action mailed August 2, 2006, alleged that Gurusamy et al. discloses a conditioning disk comprising a substrate 82, a plurality of abrasive particles, and a carrier 158.<sup>5</sup> The Examiner further alleged that Gurusamy et al. teaches that the carrier comprises at least one of synthetic plastic (such as PET or polyethylene terephthalate) or ceramic.<sup>6</sup> Appellant respectfully submits that both allegations are incorrect and are not supported by clear evidence within the Gurusamy et al. disclosure.

Appellant contends that it was clear error for the Examiner to allege that element 158 as taught by Gurusamy et al. is a carrier in a conditioning disk. Gurusamy et al. actually teaches that element 158 is an "optional removable disk holder" that is part of the end effector 80 of conditioner head 60 of the polishing apparatus 10.<sup>7</sup> Element 158 is thus a component of the polishing apparatus, not the conditioning disk as Appellant claims. Clear and convincing evidence that element 158 is part of the polishing apparatus 10 and not part of the conditioning disk is provided by Gurusamy et al.'s Brief Description of [the] Drawings and FIGs. 9, 7A and 4. Gurusamy et al. clearly disclose that "FIG. 9 is a perspective view of a conditioning disk of FIG. 4."<sup>8</sup> FIG. 9, reproduced below, does not show element 158 or any structure that could even be interpreted as element 158. As taught by Gurusamy et al., element 158 cannot be part of the conditioning disk, as Appellant claims. In fact, Gurusamy et al. actually teach that element is part of the polishing apparatus, not part of the conditioning disk. Gurusamy et al. discloses that "FIG. 7A is a top perspective view of a disk holding member of the end effector of the conditioner head of FIGs. 3A and 3B."<sup>9</sup> FIG. 7A, reproduced below, clearly references element 158 as corresponding to the disk holding member, which is separate from the conditioning disk of FIG. 9.

<sup>5</sup> Office Action mailed August 2, 2006, ¶ 9 (citing US Pat. No. 6,361,423 at column 9, lines 45 through column 11, line 60.).

<sup>6</sup> *Id.*

<sup>7</sup> US Pat. No. 6,361,423 B2 at column 6, lines 56-61; column 7, lines 52-60; and column 9, lines 48-50.

<sup>8</sup> US Pat. No. 6,361,423 B2 at column 6, lines 44-45.

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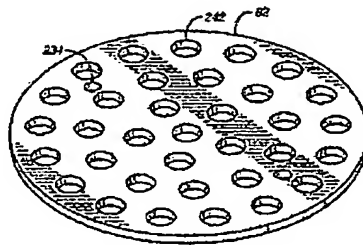


FIG. 9

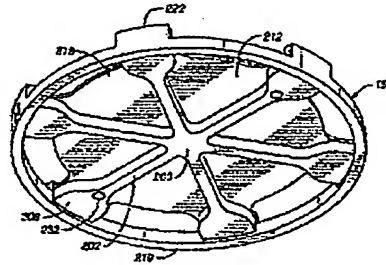


FIG. 7A

Gurusamy clearly discloses that both the disk holding member 158 and the end effector 80 are components of the polishing apparatus 10, not part of the conditioning disk. Appellant therefore respectfully asserts that the teachings of Gurusamy et al. fall short of a teaching of a conditioning disk comprising a carrier if we adopt, *arguendo*, the Examiner's view that element 158 is a carrier.

In addition, Appellant contends that Gurusamy et al., by teaching that element 158 is an "optional removable disk holder," cannot teach a conditioning disk comprising a carrier affixed to said bottom substrate surface. Furthermore, Gurusamy et al.'s teaching that a backing element may comprise PET is not an explicit teaching that optional removable disk holder 158 comprises at least one of a synthetic plastic or ceramic. Gurusamy et al. teaches that the "optional removable disk holder 158 may intervene between the disk and the backing element."<sup>10</sup> Thus, even if the backing element 156 were made of PET (a synthetic plastic), Gurusamy et al. would still not teach that removable disk holder 158 (the Examiner's alleged carrier), or the conditioning disk 80, comprises at least one of a synthetic plastic or ceramic, as Appellant claims. For at least these reasons, the Examiner has failed to meet the evidentiary burden of establishing that Gurusamy et al. teaches all elements of Appellant's independent claims 1 and 23. The rejection of independent claims 1 and 23 for purported lack of novelty over Gurusamy et al. under 35 U.S.C. § 102(e) is therefore improper, and must be reversed.

Appellant also respectfully disagrees with the rejections of the claims for purported obviousness under 35 U.S.C. 103(a) over the combination of Sung in view of Gurusamy et al., as

<sup>9</sup> US Pat. No. 6,361,423 B2 at column 6, lines 35-36.

<sup>10</sup> US Pat. No. 6,361,423 B2 at column 9, lines 48-50.

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the Office has failed to meet its burden of establishing a *prima facie* case of obviousness in view of the prior art.<sup>11</sup> A *prima facie* case of obviousness requires the Office to establish three facts:<sup>12</sup>

1. identification of a motivation to combine/modify the cited references;
2. a showing that the proposed combination provides a reasonable expectation of success; and
3. a teaching or suggestion of all of the claim limitations.

Appellant respectfully submits that the Office has failed to properly provide a combination of prior art references that teaches or suggests all-elements of Appellant's claimed invention, as required by the "all-elements" rule.<sup>13</sup> In particular, Applicant Appellant respectfully contends that the Office fails to establish a proper case of *prima facie* obviousness, at least by failing to establish that the combination of Sung and Gurusamy et al. actually teaches or suggests a conditioning disk comprising a carrier affixed to the bottom substrate surface, and further, that the Examiner has failed to meet the burden of showing that the combination of Sung and Gurusamy et al. discloses that the carrier comprises at least one of synthetic plastic or ceramic.

The Examiner alleges that Sung discloses everything except the carrier comprising at least one of a synthetic plastic or ceramic.<sup>14</sup> Appellant respectfully disagrees. In none of the prior Office Actions has the Examiner stated on the record precisely where in Sung a carrier is disclosed. Appellant cannot find even a single reference to the term "carrier" or any equivalent structure within the Sung disclosure. As noted above, Gurusamy et al. also fails to teach or suggest a conditioning disk comprising a carrier affixed to the bottom substrate surface. Appellant therefore contends that the Examiner has failed to meet the burden of establishing a proper case of *prima facie* obviousness, by failing to establish by clear and convincing evidence that the combination of references teaches or suggests all limitations of the Appellant's claims.

Even if, *arguendo*, Sung disclosed a conditioning disk comprising a carrier, the Examiner has admitted that Sung provides no teaching or suggestion of a carrier comprising at least one of a synthetic plastic or ceramic. Instead, the Examiner relies upon Gurusamy et al.'s teaching of a backing element 156 made of PET to provide this missing claim element. However, as noted above, Gurusamy et al.'s disclosure of a PET backing element 156 is not a teaching that

<sup>11</sup> See MPEP § 2142

<sup>12</sup> M.P.E.P. § 2143.

<sup>13</sup> See *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 231 USPQ 81 (Fed. Cir. 1986) ("it is axiomatic that for prior art to anticipate under 102 it has to meet every element of the claimed invention").

<sup>14</sup> Office Action mailed August 2, 2006, ¶ 9 (citing US Pat. No. 6,679,243 B2.).

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removable disk holder 158 (the Examiner's alleged carrier) is made of PET, or that removable disk holder 158 is even part of the conditioning disk 80.

In view of the above, Appellant respectfully submits that this rejection is the result of improper hindsight reconstruction of Appellant's claimed invention after reading Appellant's specification. In setting forth an obviousness rejection, one cannot "simply engage in a hindsight reconstruction of the claimed invention, using the Appellant's structure as a template and selecting elements from references to fill the gaps."<sup>15</sup> Further, both the suggestion for combining the teachings of the prior art to make the invention and the reasonable likelihood of its success must be founded in the prior art and not in the teachings of Appellant's own disclosure.<sup>16</sup>

Here, the cited art does not teach or suggest the proposed modification to include in a conditioning disk a carrier comprising at least one of a synthetic plastic or ceramic, as Appellant claims. The Examiner has provided no motivation to use Sung's conditioning disk with the "optional removable disk holder" that is part of the end effector 80 of conditioner head 60 of the polishing apparatus 10 taught by Gurusamy et al. There is no evidence one skilled in the art would use a conditioner comprising a carrier, as claimed by Appellant and allegedly taught by Sung, with a removable disk holder as taught by Gurusamy et al., because e.g., Gurusamy's disk holder, installed on the polishing apparatus, would make unnecessary a carrier fixed to the conditioning disk.

For at least these reasons, Appellant asserts that clear errors exist in the rejection of independent claims 1 and 24 under 35 U.S.C. §103(a) in view of the combination of Sung and Gurusamy et al. The rejection of independent claims 1 and 23 for purported obviousness over Sung in view of Gurusamy et al. under 35 U.S.C. § 103(a) is therefore improper, and must be reversed. Dependent claims 3-7, 10-12, 14-16, and 19-25 each depend from one of claims 1, 17 and 18. Appellant submits that a dependent claim should be allowed when its parent claim is allowed.<sup>17</sup> For at least the foregoing reasons, Appellant respectfully requests that the Panel review and reverse the final rejections under 35 U.S.C. § 102(e) and §103(a) of claims 1-12, 23, and 25-30 in the above-identified application over the cited combinations of references, and that a Panel Decision allowing the application on the existing claims be issued.

<sup>15</sup> *In re Gorman*, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991).

<sup>16</sup> *In re Dow Chem.*, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988).

<sup>17</sup> *In re McCarn*, 101 USPQ 411 (CCPA 1954).